

MICHAEL E. STUCKELBERGER

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Current Position

- Heading a group of 10 people for X-ray microscopy
- Developing scanning microscopy methods:
 - Multi-modal measurements involving XRF, XRD, XBIC, XEOL, ptychography
 - Nanoscale resolution in space and time
- Characterizing energy materials in-situ and operando
 - In-situ synthesis of semiconductors
 - Operando measurements of solar cells
- Using not only APS regularly but also NSLS II, ESRF, CLS, MAX IV, PETRA III

Education and Employment

2018 – Present **Staff scientist**, DESY, Germany
2014 – 2017 **Postdoctoral Researcher**, Arizona State University
2010 - 2014 **PhD** in Material Science, awarded EPFL & PX Group dissertation prize (EPFL, Switzerland)
2001 – 2009 **MSc / Diploma** in Physics (ETHZ, Switzerland)

Honors

2016 – 2017 **Fellowship: AZ Computing BP**, Ira A. Fulton School of Engineering, ASU
2015 **Dissertation Prize in Microtechnology** from EPFL & PX Group
2014 **Poster Award** at the 27th EU-PVSEC
2004 – 2005 **Scholarship** from the Swiss Nuclear Society

Activities

- APS-U: Reviewer for ISN beamline
- APS: Uncounted beamtimes at sectors 1, 2, 26, 34
- PETRA IV: Science case and instrument design
- PI of academic and industrial research projects from photovoltaics to geology
- Reviewer for numerous funding agencies and journals
- Organizer of workshops at APS user meeting and for PETRA IV
- Lecturer at Universität Hamburg

Goals

- Extend APS' worldwide lead in **X-ray microscopy** to APS-U
- Strengthen and **support international user community**
- Link user communities of different synchrotrons to **facilitate cross-institutional experiments**
- **Diversify APS user community** by reaching out to new communities
- **Improve data analysis support** (e.g. standardize data formats and enable remote access to computing resources for data post-processing)
- **Foster mail-in and remotely controlled experiments** beyond pandemic constraints for efficient standard measurements, while securing resources for cutting-edge hands-on experiments

Publications

<https://scholar.google.com/citations?user=ClCMSZAAAAAJ&hl=en>